

Figure 1:

1	2	3	4	5	6	7	8
					فسمنغ		
١.,	_	•	فتنا		منسة		
	•						I
				•			
		-		•			
	. :						
		· -					
L							



Figure 2:

	Klenow Fragment	E.coli pol I	Tth polymerase		polymerase	Tgo polymerase native	Tgo polymerase recombinant
Age				- Ellow-			
ille e			er i ser en traffik in mellek be 12 oktober 1982 bli de ser en se 18 oktober 1982 bli de ser en ser				
···							
1			in the second se	e Nicesaria	enaje.	1 (1) 1 (2)	
		Turken and			State of the state		
	10						
eren una			reacheanailte Tailleanailte	i. Linguage		200	
10 E							
	and a constant		- The state of the				September 1
dayaya H	eriore Antiquest	(ENGIL)		ing said of the sa	67 6. 10 ()		i San
	1				(a) Santana		
	e. History				10. 10. 4. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10.		
en description of the second o		pegtenhark Fris William Rework			***		ne de la companya de La companya de la companya de
All Prints	en e	Live Aller			•	76. 500	
Skiris							TOTAL SECTION

Figure 3:

SEQ ID NO. 6: SEQ ID NO. 7:

ATG ATC CTC GAT ACA GAC TAC ATA ACT GAG GAT GGA AAG CCC GTC ATC 48 TAC TAG GAG CTA TGT CTG ATG TAT TGA CTC CTA CCT TTC GGG CAG TAG 48 M L D Т D Y I Т Е D G K P I 16 AGG ATC TTC AAG AAG GAG AAC GGC GAG TTC ACC ATA GAC TAC GAC AGA 96 TCC TAG AAG TTC TTC CTC TTG CCG CTC AAG TGG TAT CTG ATG CTG TCT R Ι F K K E G E F N Т I D R 32 AAC TTT GAG CCA TAC ATC TAC GCG CTC TTG AAG GAC GAC TCT CCG ATT 144 TTG AAA CTC GGT ATG TAG ATG CGC GAG AAC TTC CTG CTG AGA GGC TAA 144 N F E Ρ Y I Y Α L L K D s P I 48 GAG GAC GTC AAG AAG ATA ACT GCC GAG AGG CAC GGC ACT ACC GTT AGG 192 CTC CTG CAG TTC TTC TAT TGA CGG CTC TCC GTG CCG TGA TGG CAA TCC 192 E Ι Α E R Н G Т Т v R 64 GTT GTC AGG GCC GAG AAA GTG AAG AAG AAG TTC CTA GGC AGG CCG ATA 240 CAA CAG TCC CGG CTC TTT CAC TTC TTC TTC AAG GAT CCG TCC GGC TAT 240 ν v R Α Е K V K K K F L G R P I 80 GAG GTC TGG AAG CTC TAC TTC ACT CAC CCC CAG GAC GTT CCC GCA ATC 288 CTC CAG ACC TTC GAG ATG AAG TGA GTG GGG GTC CTG CAA GGG CGT TAG 288 E v W K L Y Т Н ₽ Q D v P Α Ι 96

WO 98/14590

09/269860 PCT/EP97/05393

AGG	GAC	AAG	ATA	AAG	GAG	CAT	CCT	GCC	GTT	GTG	GAC	ATC	TAC	GAG	TAC	336
TCC	CTG	TTC	TAT	TTC	CTC	GTA	GGA	CGG	CAA	CAC	CTG	TAG	ATG	CTC	ATG	336
R	D	к	I	К	E	Н	P	A	V	v	D	I	Y	E	Y	112
GAC	ATC	CCC	TTC	GCG	AAG	CGC	TAC	CTC	ATA	GAC	AAA	GGC	TTA	ATC	CCG	384
CTG	TAG	GGG	AAG	CGC	TTC	GCG	ATG	GAG	TAT	CTG	TTT	CCG	AAT	TAG	GGC	384
D	I	P	F	A	K	R	Y	L	I	D	К	G	L	I	P	128
ATG	GAG	GGC	GAC	GAG	GAA	CTT	AAG	ATG	CTC	GCC	TTC	GAC	ATC	GAG	ACG	432
TAC	CTC	CCG	CTG	CTC	CTT	GAA	TTC	TAC	GAG	CGG	AAG	CTG	TAG	CTC	TGC	432
М	E	G	D	E	E	L	К	M	L	. А	F	D	Ī	E	т	144
CTC	TAT	CAC	GAG	GGC	GAG	GAG	TTC	GCC	GAA	GGG	CCT	ATC	CTG	ATG	ATA	480
GAG	ATA	GTG	CTC	CCG	CTC	CTC	AAG	CGG	CTT	ccc	GGA	TAG	GAC	TAC	TAT	480
L	Y	Н	E	G	E	E	F	A	E	G	P	I	L	M	I	160
AGC	TAC	GCC	GAC	GAG	GAA	GGG	GCG	CGC	GTT	ATT	ACC	TGG	AAG	AAT	ATC	528
TCG	ATG	CGG	CTG	CTC	CTT	ccc	CGC	GCG	CAA	TAA	TGG	ACC	TTC	TTA	TAG	528
S	Y	A	D	E	E	G	A	R	v	I	т	W	К	N	I	176
GAC	CTT	ccc	TAT	GTC	GAC	GTC	GTT	TCC	ACC	GAG	AAG	GAG	ATG	ATA	AAG	576
CTG	GAA	GGG	ATA	CAG	CTG	CAG	CAA	AGG	TGG	CTC	TTC	CTC	TAC	TAT	TTC	576
D	L	P	Y	v	Þ	v	V	S	T	E	K	E	M	I	ĸ	192
ĊGC	TTC	CTC	AAG	GTC	GTC	AAG	GAA	AAG	GAT	ccc	GAC	GTC	CTC	ATA	ATC	624
GCG	AAG	GAG	TTC	CAG	CAG	TTC	CTT	TTC	CTA	GGG	CTG	CAG	GAG	TAT	TAG	624
R	F	L	к	v	v	к	E	K	D	P	D	v	L	I	I	208



TAC AAC GGC GAC AAC TTC GAC TTC GCC TAC CTC AAG AAG CGC TCC GAG ATG TTG CCG CTG TTG AAG CTG AAG CGG ATG GAG TTC TTC GCG AGG CTC 672 Y N G D N F D F А Y L K K R 224 AAG CTC GGA GTC AAG TTC ATC CTC GGA AGG GAA GGG AGC GAA CCG AAA 720 TTC GAG CCT CAG TTC AAG TAG GAG CCT TCC CTT CCC TCG CTT GGC TTT K F Ι L R Ε G E P K 240 ATC CAG CGC ATG GGC GAT CGC TTT GCG GTG GAG GTC AAG GGA AGG ATT 768 TAG GTC GCG TAC CCG CTA GCG AAA CGC CAC CTC CAG TTC CCT TCC TAA 768 I Q R M G D R F Α v E ν K G R Т 256 CAC TTC GAC CTC TAC CCC GTC ATT AGG AGA ACG ATT AAC CTC CCC ACT 816 GTG AAG CTG GAG ATG GGG CAG TAA TCC TCT TGC TAA TTG GAG GGG TGA 816 D Y P v Ι R R т Ι N L Т 272 TAC ACC CTT GAG GCA GTA TAT GAA GCC ATC TTT GGA CAG CCG AAG GAG 864 ATG TGG GAA CTC CGT CAT ATA CTT CGG TAG AAA CCT GTC GGC TTC CTC 864 Y Т L Ε Α V Y E Α F I G Q Ρ K Ε 288 AAG GTC TAC GCT GAG GAG ATA GCG CAG GCC TGG GAA ACG GGC GAG GGA TTC CAG ATG CGA CTC CTC TAT CGC GTC CGG ACC CTT TGC CCG CTC CCT 912 K V Y Α E E I Α Q Α W Ε T G Ε G 304 TTA GAA AGG GTG GCC CGC TAC TCG ATG GAG GAC GCG AAG GTA ACC TAT 960 AAT CTT TCC CAC CGG GCG ATG AGC TAC CTC CTG CGC TTC CAT TGG ATA 960 Ε R Y s D Α Υ 320



GAA	CTC	GGA	AAA	GAG	TTC	TTC	CCT	ATG	GAA	GCC	CAG	CTC	TCG	CGC	CTC	1008
CTT	GAG	CCT	TTT	CTC	AAG	AAG	GGA	TAC	CTT	CGG	GTC	GAG	AGC	GCG	GAG	1008
E	L	G	к	E	F	F	P	M	E	Α	Q	L	s	R	, L	336
GTA	GGC	CAG	AGC	CTC	TGG	GAT	GTA	TCT	CGC	TCG	AGT	ACC	GGA	AAC	CTC	1056
CAT	CCG	GTC	TCG	GAG	ACC	CTA	CAT	AGA	GCG	AGC	TCA	TGG	CCT	TTG	GAG	1056
v	G	Q	s	L	W	Đ	v	s	R	s	s	T	G	N	L	352
GTC	GAG	TGG	TTT	TTG	CTG	AGG	AAG	GCC	TAC	GAG	AGG	AAT	GAA	СТТ	GCA	1104
CAG	CTC	ACC	AAA	AAC	GAC	TCC	TTC	CGG	ATG	CTC	TCC	TTA	CTT	GAA	CGT	1104
V	E	W	F	L	L	R	K	Α	Y	E	R	N	E	L	A	368
CCA	AAC	AAG	CCG	GAC	GAG	AGG	GAG	CTG	GCA	AGA	AGA	AGG	GAG	AGC	TAC	1152
GGT	TTG	TTC	GGC	CTG	CTC	TCC	CTC	GAC	CGT	TCT	TCT	TCC	CTC	TCG	ATG	1152
P	N	K	P	D	E	R	E	L	Α	R	R	R	E	S	Y	384
GCG	GGT	GGA	TAC	GTC	AAG	GAG	CCC	GAA	AGG	GGA	CTG	TGG	GAG	AAC	ATC	1200
CGC	CCA	CCT	ATG	CAG	TTC	CTC	GGG	CTT	TCC	CCT	GAC	ACC	CTC	TTG	TAG	1200
A	G	G	Y	v	ĸ	E	P	E	R	G	L	W	E	N	I	400
GTG	TAT	CTG	GAC	TTC	CGC	TCC	CTG	TAT	CCT	TCG	ATA	ATA	ATC	ACC	CAT	1248
CAC	ATA	GAC	CTG	AAG	GCG	AGG	GAC	ATA	GGA	AGC	TAT	TAT	TAG	TGG	GTA	1248
v	Y	L	D	F	R	S	L	Y	P	S	I	I	I	T	Н	416
AAC	GTC	TCC	CCT	GAT	ACA	CTC	AAC	AGG	GAG	GGT	TGT	GAG	GAG	TAC	GAC	1296
TTG	CAG	AGG	GGA	CTA	TGT	GAG	TTG	TCC	CTC	CCA	ACA	CTC	CTC	ATG	CTG	1296
N	v	s	P	D	T	L	N	R	E	G	С	E	E	Y	D	432



GTG	GCT	CCT	CAG	GTA	GGC	CAT	AAG	TTC	TGC	AAG	GAC	TTC	CCC	GGC	TTC	1344
CAC	CGA	GGA	GTC	CAT	CCG	GTA	TTC	AAG	ACG	TTC	CTG	AAG	GGG	CCG	AAG	1344
v	A	P	Q	v	G	Н	К	F	С	к	D	F	P	G	F	448
ATC	CCA	AGC	CTC	CTC	GGA	GAC	CTC	TTG	GAG	GAG	AGA	CAG	AAG	GTA	AAG	1392
TAG	GGT	TCG	GAG	GAG	CCT	CTG	GAG	AAC	CTC	CTC	TCT	GTC	TTC	CAT	TTC	1392
I	P	S	L	L	G	D	L	L	E	E	R	Q	ĸ	v	ĸ	464
AAG	AAG	ATG	AAG	GCC	ACT	ATA	GAC	CCA	ATC	GAG	AAG	AAA	CTC	CTC	GAT	1440
TTC	TTC	TAC	TTC	CGG	TGA	TAT	CTG	GGT	TAG	CTC	TTC	TTT	GAG	GAG	CTA	1440
ĸ	К	M	ĸ	A	T	I	D	P	I	E	ĸ	ĸ	L	L	D	480
TAC	AGG	CAA	CGA	GCA	ATC	AAA	ATC	CTT	GCT	ААТ	AGC	TTC	TAC	GGT	TAC	1488
ATG	TCC	GTT	GCT	CGT	TAG	TTT	TAG	GAA	CGA	TTA	TCG	AAG	ATG	CCA	ATG	1488
Y	R	Q	R	A	I	К	I	L	A	N	S	F	Y	G	Y	496
TAC	GGC	TAT	ACA	AAG	GCC	CGC	TGG	TAC	TAC	AAG	GAG	TGC	GCC	GAG	AGC	1536
ATG	CCG	ATA	TGT	TTC	CGG	GCG	ACC	ATG	ATG	TTC	CTC	ACG	CGG	CTC	TCG	1536
Y	G	Y	T	K	A	R	W	Y	Y	ĸ	E	С	Α	E	S	512
GTT	ACC	GGT	TGG	GGC	AGG	GAG	TAC	ATC	GAG	ACC	ACG	ATA	AGG	GAA	ATA	1584
CAA	TGG	CCA	ACC	CCG	TCC	CTC	ATG	TAG	CTC	TGG	TGC	TAT	TCC	CTT	TAT	1584
v	Т	G	W	G	R	E	Y	I	E	T	т	I	R	E	I	528
GAG	GAG	AAA	TTT	GGC	TTT	AAA	GTC	CTC	TAC	GCG	GAC	ACA	GAT	GGA	TTT	1632
CTC	CTC	TTT	AAA	CCG	AAA	TTT	CAG	GAG	ATG	CGC	CTG	TGT	CTA	CCT	AAA	1632
E	E	ĸ	F	G	F	к	v	L	Y	A	D	т	D	G	F	544
TTC	GCA	ACA	ATA	CCT	GGA	GCG	GAC	GCC	GAA	ACC	GTC	AAA	AAG	AAG	GCA	1680
AAG	CGT	TGT	TAT	GGA	CCT	CGC	CTG	CGG	CTT	TGG	CAG	TTT	TTC	TTC	CGT	1680

7/16



AAG	GAG	TTC	CTG	GAC	TAC	ATC	AAC	GCC	AAA	CTG	ccc	GGC	CTG	CTC	GAA	1728
TTC	CTC	AAG	GAC	CTG	ATG	TAG	TTG	CGG	TTT	GAC	GGG	CCG	GAC	GAG	CTT	1728
K	E	F	L	D	Y	I	N	A	к	L	P	G	L	L	E	576
CTC	GAA	TAC	GAG	GGC	TTC	TAC	AAG	CGC	GGC	TTC	TTC	GTG	ACG	AAG	AAG	1776
GAG	CTT	ATG	CTC	CCG	AAG	ATG	TTC	GCG	CCG	AAG	AAG	CAC	TGC	TTC	TTC	1776
L	E	Y	E	G	F	Y	к	R	G	F	F	v	Т	К	К	592
_	_	-	_	Ū	•	•	••		•	•	•	•	•		IX.	332
AAG	TAC	GCG	GTT	ATA	GAC	GAG	GAG	GAC	AAG	ATA	ACG	ACG	CGC	GGG	CTT	1824
TTC	ATG	CGC	CAA	TAT	CTG	CTC	CTC	CTG	TTC	TAT	TGC	TGC	GCG	ccc	GAA	1824
K	Y	Α	v	I	D	E	E	D	к	I	T	T	R	G	L	608
CDD	מיחית	GTT	אככ	CCT	CAC	TTCC	אכר	CAC	א ידי א	ccc	7 7 C	C N C	700	G N G	666	1070
																1872
CTT	TAT	CAA	TCC	GCA	CTG	ACC	TCG	CTC	TAT	CGC	TTC	CTC	TGC	GTC	CGC	1872
E	I	V	R	R	D	W	S	E	I	A	K	E	T	Q	A	624
∆ GG	ር ጥጥ	CTT	GNG	ece	מידת	CTIA	מממ	CAC	GGT	CAC	CTT	~ A A	C	ccc	CMA	1000
																1920
TCC	CAA	GAA	CTC	CGC	TAT	GAT	TTC	GTG	CCA	CTG	CAA	CTT	CTT	CGC	CAT	1920
R	v	L	E	A	I	L	К	H	G	D	v	E	E	Α	v	640
AGG	Δጥጥ	GTC	ΔΔΔ	GAG	ርጥጥ	ACG	GAG	AAG	CTG	AGC	AAG	ጥ ልሮ	GAG.	CTTT	רכז	1968
																1900
TCC	TAA	CAG	TTT	CTC	CAA	TGC	CTC	TTC	GAC	TCG	TTC	ATG	CTC	CAA	GGT	1968
R	I	V	K	E	v	T	E	ĸ	L	S	K	Y	E	V	P	656
ccc	CAC	D D C	cmc	cmc	7 mc	ma c	CNC	C	א מווא	200	~~~	C	ome.		a	
		AAG														2016
GGC	CTC	TTC	GAC	CAG	TAG	ATG	CTC	GTC	TAT	TGG	GCG	CTG	GAC	TTC	CTG	2016
P	E	K	L	v	I	Y	E	Q	I	T	R	D	L	K	D	672

8/16





TAC	AAG	GCC	ACC	GGG	CCG	CAT	GTG	GCT	GTT	GCA	AAA	CGC	CTC	GCC	GCA	2064
ATG	TTC	CGG	TGG	CCC	GGC	GTA	CAC	CGA	CAA	CGT	TTT	GCG	GAG	CGG	CGT	2064
Y	K	A	T	G	P	Н	v	Α	v	A	ĸ	R	L	A	Α	688
AGG	GGG	АТА	AAA	ATC	CGG	ccc	GGA	ACG	GTC	ΆΤΆ	AGC	TAC	ATC	GTG	CTC	2112
						GGG										2112
R	G	I	ĸ	I	R	P	G	Т	v	ı	s	Y	I	v	L	704
*	J	•	10	•	• • • • • • • • • • • • • • • • • • • •	•	J	•	•	1	3	1	-	•	'n	704
AAA	GGC	TCG	GGA	AGG	ATT	GGG	GAC	AGG	GCT	ATA	ccc	TTT	GAC	GAA	TTT	2160
TTT	CCG	AGC	CCT	TCC	TAA	ccc	CTG	TCC	CGA	TAT	GGG	AAA	CTG	CTT	AAA	2160
K	G	s	G	R	I	G	D	R	Α	I	P	F	D	E	F	720
GAC	CCG	GCA	AAG	CAC	AAG	TAC	GAT	GCA	GAA	TAC	TAC	ATC	GAG	AAC	CAG	2208
CTG	GGC	CGT	TTC	GTG	TTC	ATG	CTA	CGT	CTT	ATG	ATG	TAG	CTC	TTG	GTC	2208
D	P	A	к	Н	К	Y	D	A	E	Y	Y	I	E	N	Q	736
CTTT	CTTT	CCA	CCT	CTTC	CNC	AGG	አጥጥ	CTC	NCC	ccc	աատ	CCT	መአሮ	C C TT	7.7.7.	2256
CAA		GGT	CGA	CAC		TCC		GAC		CGG	AAA	CCA	ATG	GCA	TTT	2256
. V	L	P	Α	V	E	R	I	L	R	Α	F	G	Y	R	K	752
GAA	GAT	TTA	AGG	TAT	CAG	AAA	ACG	CGG	CAG	GTT	GGC	TTG	GGG	GCG	TGG	2304
CTT	CTA	AAT	TCC	ATA	GTC	TTT	TGC	GCC	GTC	CAA	CCG	AAC	CCC	CGC	ACC	2304
E	D	L	R	Y	Q	к	T	R	Q	v	G	L	G	A	W	768
CTA	AAA	CCT	AAG	ACA	TGA											2322
GAT	TTT	GGA	TTC	TGT	ACT											2322
L	ĸ	P	ĸ	T	*											773

Figure 4:

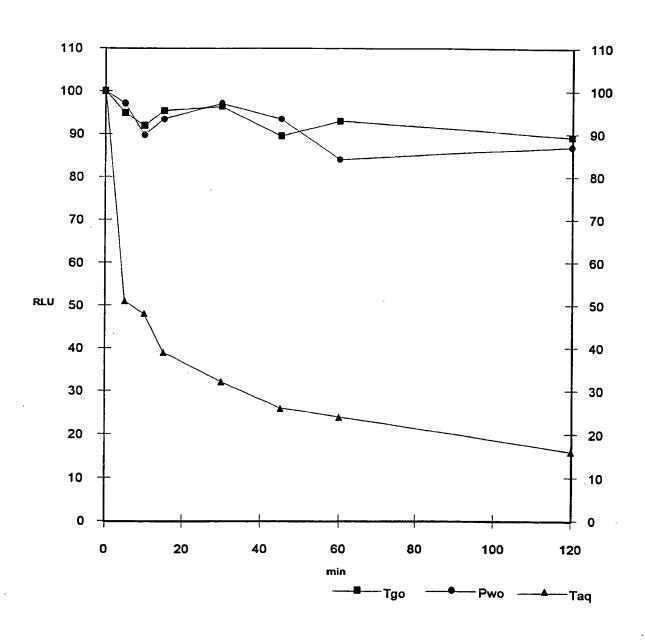




Figure 5:

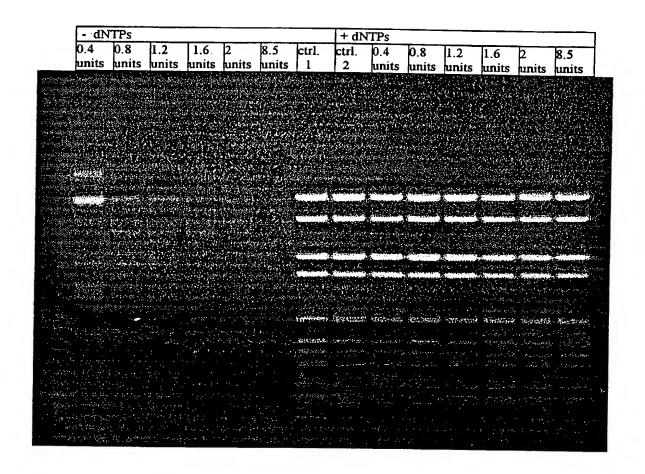


Figure 6:

M	V	en	t ex	(O (T	li ez	(O)			9°N _r	n				Tac	1		M
	1	\mathbf{I}	2	3	I	4	5	1	2	3	4	5	1	2	3	4	5	
						5				11.18 July		42114.0						
												la consta						
									1000									
									1900	er yr Trawyd a								
										m for ess.								
100												j						annie i
Service.																		
Sections								1000		gwar i								HAGI
*							e ji seleta	or inte	2 30.0	eguer verv								district.
 خستسف			en en en en En en en en															-
2.5	Time!	¥. 6					-						- Alleron			-	نسنة د	Va.
2																	** ***	42.64
200	- 123 - 123																	8.0%
		-																

PCT/EP97/05393

Figure 7:

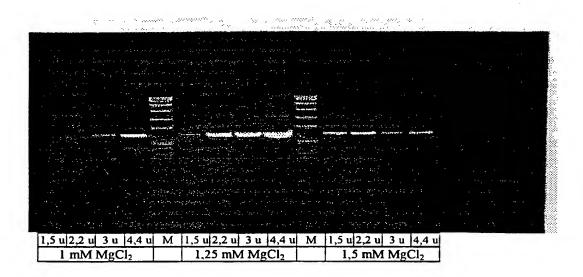
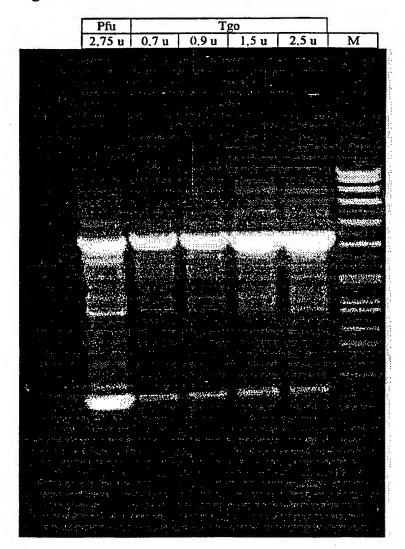




Figure 8:



> 2.



Figure 9:

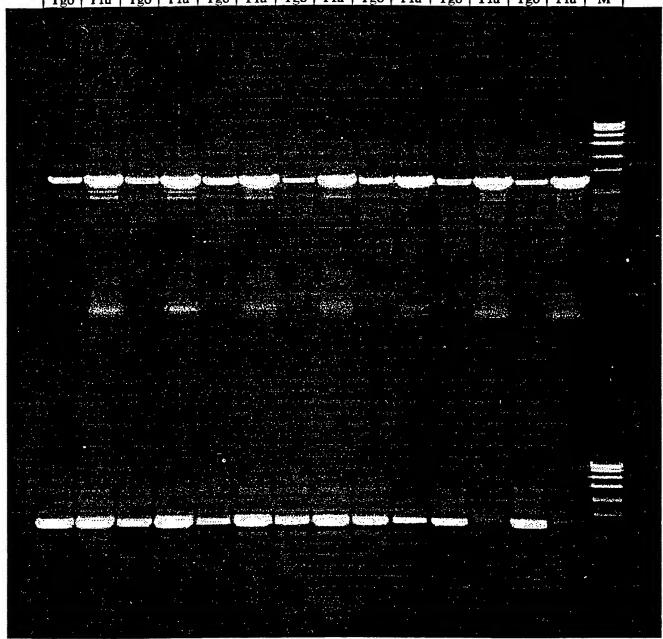
		pH 9,1			pH 8,8			pH 8,5			pH 8,2	2
M	Tgo	Tgo	Pfu	Tgo	Tgo	Pfu	Tgo	Tgo	Pfu	Tgo	Tgo	Pfu
	lu			lu	2,5 u	2,5 u	lu	2,5 u	2,5 u	l u	2,5 u	2,5 u
				orași est Pragressori								
		Haraman .						Victoriae i.		v jedi i		
				arar sing	er de la company	i minuma k			orientalista. Personalista			
	;		North Market		NOARSKA. NASKARA		1995年 11日 11日 11日 - 11日本		and the second			and the second
Same of the same of		er parties	14-12-142	4 1	Section 1	en e					وينيدا	6 th
Martine St.		•	ALC: UNIT									
1					B - 10-4			eritoria Para de	10000			-
		May disting	1.0		V	માર્ડસન	W.,		2.76			
79.45						A TOTAL				7	er territoria. Oriente	Marinest April
		, c	deservitive	4 ()		in dias			A. SEL NE			12 * 12 * 1
	engry d		13 mark 1				13-14-y-1 5-1-14-y-1					if amount is
						W. T. C. S. C.	erana erana erana. Alaman erana	maken ji m Hilipaga Ak Jarah Mara	Treeff (Text)	A PAIN S.	grad the St	1
				1. 1. 1.				4.				
	ر ماه را د نو چم ده ره	and the second		organis social Social				siliya ka ili. Hara				
					f:							
				A PARE			4 151					
				e e e de la								
	ger de production. Description			ر دور دور درومه دور و کارور		gan kanada Kabupatèn	Congress my k					
ARR S				, Alley								
	10.33	11.55					ia di					
or and the second												
							¥-11/0	DAS BROWN				
eminer 7		er re			· 100	richt.						$(V, \zeta), (V, Y, Y)$
ermina Sept	Air	33 414			really and the		7 ***	america a service at	/			
ermine 194	Ž.					A STATE			langer per er St	1 A A A		
e de la companya de l	A A											
estaluis 11 (23)										A SA		
								mos decem				
normals.										The second secon		Table 1 to 1 t
erranti												Table 1
ACTIVATE OF THE STATE OF THE ST						Till generalise nga generalise Tilgangsaga Tilgangsaga		rgin grandr Les is Chuidhann Grand Les is				
**************************************						Till generalise nga generalise Tilgangsaga Tilgangsaga		rgin grandr Les is Chuidhann Grand Les is				

M	Tgo l u	Tgo 2,5 u	Pfu 2,5 u	Tgo l u	Tgo 2,5 u	Pfu 2,5 u	Tgo 1 u	Tgo 2,5 u	Pfu 2,5 u
_		pH 9,1			pH 8,8			pH 8,5	



Figure 10:

0 M	KCl	5 M	KCl	10 M	KCl	15 M	KC1	20 M	KCI	25 M	KCI	30 M	KCl	
Tgo	Pfu	Tgo	Pfu	Tgo	Pfu	Tgo	Pfu	Tgo	Pfu	Tgo	Pfu	Tgo	Pfu	M



					70 M KCI		
Tgo Pfu	Tgo Pfu	M					